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ABSTRACT

Characteristics and practices identified by research associated with improvement in student performance are synthesized. Findings are organized in three sections: the classroom; the school building; and the district. The research base upon which this synthesis is drawn focused upon: (1) school effects research: the whole school studied to identify schoolwide practices that help students learn; (2) teacher effects research: studies of teachers in the classroom to discover effective practices; (3) research on instructional leadership: studies focused on what principals do to support teaching and learning; (4) curriculum alignment research: studies of effective methods of organizing and managing curriculum; (5) program coupling research: examination of the interrelationships among practices used at the district, school building and classroom levels; and (6) research on educational change: studies to identify conditions and practices that promote significant, durable change in educational programs. Citations from research supporting the synthesized findings are provided. An extensive bibliography of effective schooling research is included. (JD)

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EFFECTIVE SCHOOLING PRACTICES: A RESEARCH SYNTHESIS

Onward to Excellence: Making Schools More Effective

ED255511

The Effective Schooling Research

The effective schooling research base identifies schooling practices and characteristics associated with measurable improvements in student achievement and excellence in student behavior. These "effective schooling practices" include elements of schooling associated with a clearly defined curriculum; focused classroom instruction and management; firm, consistent discipline; close monitoring of student performance and strong instructional leadership.

This booklet provides a synthesis of findings from the effective schooling research. The research base includes six parts, each with a particular focus:

- *School Effects Research:* the whole school is studied to identify schoolwide practices that help students learn.
- *Teacher Effects Research:* studies of teachers in the classroom to discover effective practices.
- *Research on Instructional Leadership:* studies focused on what principals do to support teaching and learning.
- *Curriculum Alignment Research:* studies of effective methods of organizing and managing curriculum.
- *Program Coupling Research:* examination of the interrelationships among practices used at the district, school building and classroom levels.
- *Research on Educational Change:* studies to identify conditions and practices that promote significant, durable change in educational programs.

A broad and surprisingly integrated picture of effective schooling emerges when findings from all six parts of the research base are synthesized. This research base, however, is uneven in terms of quality, and the summary of findings reported in this synthesis should be treated with some caution. Some findings are very well supported, others are more speculative. Therefore, our understanding of effectiveness cannot be entirely conclusive. However, the consistency in the findings across many studies using a variety of methodologies is strong and suggests that the research base in fact reveals key elements of effective schooling.

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Goal Based Education Program

Use of the Synthesis

This research synthesis describes characteristics and practices identified by research as associated with improvements in student performance. Findings have been organized in three sections, each focused on one level of school organization: the classroom, the school building and the district. Groups of practices derived from the research have been organized into subsections to support particular approaches, methods and techniques that studies indicate are effective in schools.

At the end of each subsection are lists of citations from the research supporting findings synthesized in that subsection. While not inclusive of all studies reviewed, these research reports provide support for effective schooling practices cited. Citations are referenced in the bibliography which appears as an appendix to this booklet.

Findings summarized here will be of interest to persons exploring or involved in school improvement efforts. The synthesis can stimulate discussion of instructional issues, guide the development of appropriate local improvements and aid in decision making as school improvements take place. When integrated into a locally-determined plan for action, these practices can be of significant assistance in the improvement of local schools.

This booklet, however, cannot legitimately be utilized as a checklist or instrument of any kind for evaluating the performance of individual teachers or principals. The synthesis should not be used as a blueprint for local school improvements. It is not a simple recipe or a process for school improvement, it is not a staff development program, nor is it a program for supervision.

We believe that the findings presented here merit the attention of educators and others interested in helping students be successful learners. The clear and optimistic message in these findings is that schools do make a difference and that, with an appropriate concentration of will and effort, teachers and administrators can very substantially influence student success. We suggest that readers pursue appropriate practices by reviewing the research and considering processes for improvement which are appropriate to local needs.

Further Information

The NWREL Goal Based Education Program has developed a process for use by local schools in applying effective schooling research results to meet local school improvement goals. For further information about effective schooling or about the NWREL process, contact:

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1 CLASSROOM CHARACTERISTICS AND PRACTICES

Learning is an individual process that is shaped in the classroom. On a daily basis, teachers and students work together to extend and refine each learner's set of concepts and skills. Thoroughly planned lessons, focused instruction and positive classroom management increase the probability of success.

1.1 INSTRUCTION IS GUIDED BY A PREPLANNED CURRICULUM

- Learning goals and objectives are developed and prioritized according to district and building guidelines, selected or approved by teachers, sequenced to facilitate student learning and organized or grouped into units or lessons.
- Unit or lesson objectives are set in a timeline so that the calendar can be used for instructional planning.
- Instructional resources and teaching activities are identified, matched to objectives and student developmental levels and recorded in lesson plans. Alternative resources and activities are identified, especially for priority objectives.
- Resources and teaching activities are reviewed for content and appropriateness and are modified according to experience to increase their effectiveness in helping students learn.

Behr (1981); Blumberg (1980); Cohen, S. (1982); Denham (1980); Doherty (1981); Edmonds (1979a); Jorgenson (1977); Leithwood (1982); McGeown (1979-80); Niedermeyer (1981); Rosenshine (1983); Sarason (1971); Venezky (1979); Wilson (1981)

1.2 THERE ARE HIGH EXPECTATIONS FOR STUDENT LEARNING

- Teachers set high standards for learning and let students know they are all expected to meet them. Standards are set so they are both challenging and attainable.
- Quality standards for academic work are set and maintained consistently.
- No students are expected to fall below the level of learning needed to be successful at the next level of education.
- Teachers expect students to do well on tests and earn good grades.

Berliner (1979); Block (1976); Bloom (1976); Brookover (1979a); Good (1979c); PDK (1980); Rist (1970); Rosenshine (1983)

1.3 STUDENTS ARE CAREFULLY ORIENTED TO LESSONS

- Teachers help students get ready to learn. They explain lesson objectives in simple, everyday language and refer to them throughout lessons to maintain focus.
- Objectives may be posted or handed out to help students keep a sense of direction. Teachers check to see that objectives are understood.
- The relationship of a current lesson to previous study is described. Students are reminded of key concepts or skills previously covered.
- Students are challenged to learn, particularly at the start of difficult lessons. Students know in advance what's expected and are ready to learn.

Block (1976); Bloom (1976); Good (1979b,c); Levin (1981); Rosenshine (1983); Stallings (1979)

1.4 INSTRUCTION IS CLEAR AND FOCUSED

- Lesson activities are previewed; clear written and verbal directions are given; key points and instructions are repeated; student understanding is checked.
- Presentations, such as lectures or demonstrations, are designed to communicate clearly to students; digressions are avoided.
- Students have plenty of opportunity for guided and independent practice with new concepts and skills.
- To check understanding, teachers ask clear questions and make sure all students have a chance to respond.
- Teachers select problems and other academic tasks that are well matched to lesson content so student success rate is high. Seatwork assignments also provide variety and challenge.
- Homework is assigned that students can complete successfully. It is typically in small increments and provides additional practice with content covered in class; work is checked and students are given quick feedback.
- Parents help keep students involved in learning. Teachers let parents know that homework is important and give them tips on how to help students keep working.

Becker (1980); Becker (1977); Berliner (1976); Brophy (1979); Cobb (1973); Crawford (1975); Duffy (1980); Evertson (1982b); Fitzpatrick (1982); Gage (1978); Good (1977); Good (1979a,b,c); Hunter (1977); Kennedy (1978); Larkin (1976); Levine (1981a); Levine (1982a,b); Lortie (1975); McKenzie (1979); Medley (1978); Rosenshine (1979); Rosenshine (1983); Rutter (1979); Soar (1973); Stallings (1979)

1.5 LEARNING PROGRESS IS MONITORED CLOSELY

- Teachers frequently monitor student learning, both formally and informally.
- Teachers require that students be accountable for their academic work.
- Classroom assessments of student performance match learning objectives. Teachers know and use test development techniques to prepare valid, reliable assessment instruments.
- Routine assessment procedures make checking student progress easier. Students hear results quickly; reports to students are simple and clear to help them understand and correct errors; reports are tied to learning objectives.
- Teachers use assessment results not only to evaluate students but also for instructional diagnosis and to find out if teaching methods are working.
- Grading scales and mastery standards are set high to promote excellence.
- Teachers encourage parents to keep track of student progress, too.

Bachelor (1982); Behr (1981); Berliner (1979); Bloom (1974); Brookover (1979b); Cohen (1981); Evertson (1982a); Medley (1979); Mulazzo (1982); Weber (1971); Wynne (1981)

1.6 WHEN STUDENTS DON'T UNDERSTAND, THEY ARE RETAUGHT

- New material is introduced as quickly as possible at the beginning of the year or course, with a minimum review or reteaching of previous content. Key prerequisite concepts and skills are reviewed thoroughly but quickly.

- Teachers reteach priority lesson content until students show they've learned it.
- Regular, focused reviews of key concepts and skills are used throughout the year to check on and strengthen student retention.

Block (1976); Bloom (1976); Burns (1979); Hyman (1979); Levin (1981); Reid (1980); Rosenshine (1983).

1.7 CLASS TIME IS USED FOR LEARNING

- Teachers follow a system of priorities for using class time and allocate time for each subject or lesson. They concentrate on using class time for learning and spend very little time on non-learning activities.
- Teachers set and maintain a brisk pace for instruction that remains consistent with thorough learning. New objectives are introduced as quickly as possible; clear start and stop cues help pace lessons according to specific time targets.
- Students are encouraged to pace themselves. If they don't finish during class, they work on lessons before or after school, during lunch or in other time so they keep up with what's going on in class.

Arlin (1979); Berliner (1979); Brookover (1979a); Cohen, S. (1982); Cooley (1980); Denham (1980); Gambrell (1981); Glynn (1975); Ramey (1982); Rosenshine (1978); Rosenshine (1979); Rosenshine (1983); Stallings (1974); Stallings (1980); Wynn (1979).

1.8 THERE ARE SMOOTH, EFFICIENT CLASSROOM ROUTINES

- Class starts quickly and purposefully, teachers have assignments or activities ready for students when they arrive. Materials and supplies are ready, too.
- Students are required to bring the materials they need to class each day; they use assigned storage space.
- Administrative matters are handled with quick, efficient routines that keep class disruptions to a minimum.
- There are smooth, rapid transitions between activities throughout the day or class.

Arnold (1976); Brophy (1979); Edmonds (1979a); Emmer (1982); Emmer (1982b); Evertson (1982b); Kounin (1977); Medley (1979); Sanford (1981).

1.9 INSTRUCTIONAL GROUPS FORMED IN THE CLASSROOM FIT INSTRUCTIONAL NEEDS

- When introducing new concepts and skills, whole-group instruction, actively led by the teacher, is preferable.
- Smaller groups are formed within the classroom as needed to make sure all students learn thoroughly. Students are placed according to individual achievement levels; underplacement is avoided.
- Teachers review and adjust groups often, moving students when achievement levels change.

Good (1979a); Medley (1979); Rosenshine (1979); Rosenshine (1983); Stallings (1974); Stallings (1979); Webb (1982); Wellisch (1978).

1.10 STANDARDS FOR CLASSROOM BEHAVIOR ARE EXPLICIT

- Teachers let students know that there are high standards for behavior in the classroom.
- Classroom behavior standards are written, taught and reviewed from the beginning of the year or the start of new courses.
- Rules, discipline procedures and consequences are planned in advance. Standards are consistent with or identical to the building code of conduct.
- Consistent, equitable discipline is applied for all students. Procedures are carried out quickly and clearly linked to students' inappropriate behavior.
- Teachers stop disruptions quickly, taking care to avoid disrupting the whole class.
- In disciplinary action, the teacher focuses on the inappropriate behavior, not on the student's personality.

Anderson, L. M. (1982); Brophy (1979); Brophy (1974a); Brophy (1979); Cooley (1983); Emmer (1980a,b); Emmer (1982); Everston (1982a); Everston (1982b); Good (1979a); Kounin (1974); Kounin (1977); Medley (1978); O'Leary (1979); Rutter (1979); Sanford (1981); Soar (1973).

1.11 PERSONAL INTERACTIONS BETWEEN TEACHERS AND STUDENTS ARE POSITIVE

- Teachers pay attention to student interests, problems and accomplishments in social interactions both in and out of the classroom.
- Teachers make sure they let students know they really care.
- Students are allowed and encouraged to develop a sense of responsibility and self-reliance. Older students in particular are given opportunities to take responsibility for school-related matters and to participate in making decisions about important school issues.

Emmer (1982); Everston (1981); Rutter (1979).

1.12 INCENTIVES AND REWARDS FOR STUDENTS ARE USED TO PROMOTE EXCELLENCE

- Excellence is defined by objective standards, not by peer comparison. Systems are set up in the classroom for frequent and consistent rewards to students for academic achievement and excellent behavior. Rewards are appropriate to the developmental level of students.
- All students know about the rewards and what they need to do to get them. Rewards are chosen because they appeal to students.
- Rewards are related to specific student achievements. Some rewards may be presented publicly; some should be immediately presented, while others delayed to teach persistence.
- Parents are told about student successes and requested to help students keep working toward excellence.

Brophy (1979); Brophy (1981); Emmer (1981); Everston (1981); Hunter (1972); Roosevelt (1977); Rutter (1979); Walker (1976).

2 SCHOOL CHARACTERISTICS AND PRACTICES

The school is more than a collection of people, subjects and grade levels. The qualities of the school as a whole can either enhance or detract from the classroom learning environment. Clear expectations, consistency and collaboration among adults, strong instructional leadership and a central focus on learning are all important in pursuing instructional effectiveness.

2.1 EVERYONE EMPHASIZES THE IMPORTANCE OF LEARNING

- All staff have high expectations for student achievement. Expectations are for all students; all students are expected to work hard toward the attainment of priority learning goals.
- Everyone accepts that school is a place for learning.
- When educational issues arise, student learning considerations are the most important criteria used in decision making.

Armor (1976), Berliner (1979), Brookover (1979a), Brundage (1979), Edmonds (1979a,c), Madden (1976), New York SDE (1974), Rutter (1979), Weber (1971), Weiss (1975), Wellisch (1978).

2.2 STRONG LEADERSHIP GUIDES THE INSTRUCTIONAL PROGRAM

- Instructional leaders portray learning as the most important reason for being in school; public speeches and writings emphasize the importance and value of high achievement.
- The leader has a clear understanding of the school's mission and is able to state it in direct, concrete terms. Instructional focus is established that unifies staff. The building leadership believes that all students can learn and that the school makes the difference between success and failure.
- Building leaders know and can apply teaching and learning principles; they know research, legitimize it and foster its use in problem solving. Effective teaching practices are modeled for staff as appropriate.
- Leaders set expectations for curriculum quality through the use of standards and guidelines. Alignment is checked and improved; priorities are established within the curriculum; curriculum implementation is monitored.
- Learning time is protected from disruption. Administrative matters are handled with time conserving routines that don't disrupt instructional activities; time use priorities are established, widely communicated and enforced.
- A safe, orderly school environment is established and maintained.
- Instructional leaders check student progress frequently, relying on explicit performance data. Results are made visible; progress standards are set and used as points of comparison; discrepancies are used to stimulate action.
- Leaders set up systems of incentives and rewards to encourage excellence in student and teacher performance; they act as figureheads in delivering awards and highlighting the importance of excellence.

- Resources needed to ensure the effectiveness of instructional programs are acquired; resources are sought from many sources, including the community, as needed; allocations are made according to instructional priorities.
- School leaders establish standard procedures which guide parent involvement. Emphasis is placed on the importance of parental support of the school's instructional efforts.
- There is frequent, two-way communication with parents. Leaders make the accomplishments of students, staff and the school as a whole visible to the public.
- Instructional leaders expect all staff to meet high instructional standards. Agreement is obtained on a schoolwide instructional model; classroom visits to observe instruction are frequent; teacher supervision focuses on instructional improvement; staff development opportunities are secured and monitored.
- Leaders express an expectation and strong desire that instructional programs improve over time. Improvement strategies are organized and systematic; they are given high priority and visibility; implementation of new practices is carefully monitored; staff are supported.
- Leaders involve staff and others in planning implementation strategies. They set and enforce expectations for participation; commitments are made and followed through with determination and consistency; leaders rally support from the different constituencies in the school community.

Berman (1979), Blumberg (1980), Bossert (1982), Brookover (1979b), Brundage (1979), Clark (1980), Crandall (1982), Duke (1982), Edmonds (1979a), Emrick (1977), Hall (1980), Hargrove (1981), Leithwood (1982), Lipham (1981), Little (1981), Madden (1976), New York SDE (1974), Purkey (1983), Stallings (1981b), Venezky (1979), Weber (1971), Wellisch (1978).

2.3 THE CURRICULUM IS BASED ON CLEAR GOALS AND OBJECTIVES

- Learning goals and objectives are clearly defined and displayed; teachers actively use building curriculum resources for instructional planning. District curriculum resources are used, when available.
- Clear relationships among learning goals, instructional activities and student assessments are established and written down.
- Collaborative curriculum planning and decision making are typical. Special attention is focused on building good continuity across grade levels and courses; teachers know where they fit in the curriculum.
- Staff, students and the community know the scope of the curriculum and the priorities within it.

Behr (1981), Blumberg (1980), Edmonds (1979a), Jorgenson (1977), Leithwood (1982), Doherty (1981), McGeown (1979-80), Niedermeyer (1981), Sarason (1971), Venesky (1979), Wilson (1981).

2.4 STUDENTS ARE GROUPED TO PROMOTE EFFECTIVE INSTRUCTION

- In required subjects and courses, students are placed in heterogenous groups; tracks are avoided; underplacement is avoided.
- Instructional aides and classroom grouping techniques are used to help keep the adult/student ratio low, especially during instruction aimed at priority objectives.

Brookover (1979b), California SDE (1977), Ramey (1982), Stallings (1974), Stallings (1979), Webb (1980), Wellisch (1978).

2.5 SCHOOL TIME IS USED FOR LEARNING

- School events are scheduled to avoid disruption of learning time.
- Everyone understands time-use priorities; school communications highlight the need for time for learning; procedures are developed to maximize learning time.
- Time use allocations are established among subjects taught; time use guidelines are followed by staff.
- The school calendar is organized to provide maximum learning time. Prior to adoption, new instructional programs or school procedures are evaluated according to their potential impact on learning time.
- During the school day, unassigned time and time spent on non-instructional activities are minimal; the school day, classes and other activities start and end on time.
- Student pullouts from regular classes are minimized, either for academic or non-academic purposes. The amount of pullout activity is monitored and corrective action taken as necessary to keep things in balance.
- Extra learning time is provided for students who need or want it; students can get extra help outside of regular school hours.

Brookover (1979a), Denham (1980), Glass (1977), Murphy (1982), Stallings (1981b), Wiley (1974), Wilson (1981)

2.6 LEARNING PROGRESS IS MONITORED CLOSELY

- Test results, grade reports, attendance records and other methods are used to spot potential problems. Changes are made in instructional programs and school procedures to meet identified needs.
- Summaries of student performance are shared with all staff who then assist in developing action alternatives. Periodic reports are also made to the community.
- Assessments are coordinated; district, school, and classroom efforts work together; duplication of effort is minimal. Assessments match learning objectives.
- Staff follow simple routines for collecting, summarizing and reporting student achievement information; results are related to learning objectives. Individual student records are established and updated periodically; group summaries are pulled from individual reports and reviewed over time to check for trends.

Brookover (1979b), Edmonds (1979a), Leithwood (1982), Madden (1976), New York SDE (1974), Purkey (1983), Venezky (1979), Weber (1971) Wellisch (1978)

2.7 DISCIPLINE IS FIRM AND CONSISTENT

- A written code of conduct specifies acceptable student behavior, discipline procedures and consequences; students, parents and staff know the code; students and staff receive initial training and periodic reviews of key features.
- Discipline procedures are routine and quick to administer. Disciplinary action quickly follows infractions and is always consistent with the code; treatment is equitable for all students. Follow-up and action for absenteeism and tardiness normally occur within a day.
- Students are told why they are being disciplined, in terms of the code of conduct.
- Discipline is administered in a neutral, matter-of-fact way; the disciplinarian focuses on the student's behavior, not on personality.
- Out-of-school suspensions or expulsions are minimal; in-school suspension is used in most cases.

Brookover (1979a); California SDE (1977); Edmonds (1979a); Madden (1976); Michigan SDE (1974); New York SDE (1974); Rutter (1979); Stallings (1981b); Thompson (1967); U.S. DHEW (1978); Weber (1971).

2.8 THERE ARE HIGH EXPECTATIONS FOR QUALITY INSTRUCTION

- All staff believe that students can learn regardless of their ability level and enthusiastically accept the challenge to teach them. When staff get together they often discuss instructional issues.
- Supervision and evaluation procedures are written and intended to help teachers set and work toward professional growth goals. All staff receive feedback on performance at least annually.
- Classroom observations are made according to guidelines developed in advance; feedback is provided quickly; emphasis is on improving instruction and boosting student achievement.
- Established troubleshooting routines help staff get quick resolution of instruction-related concerns.
- Staff development opportunities are provided; emphasis is on skill building; content addresses key instructional issues and priorities. Inservice activities are related to and build on each other; incentives encourage participation.

Austin (1979); Brookover (1979a); Cotton (1980c); Dornbush (1975); Duke (1982); Edmonds (1979a); Gross (1965); Leithwood (1982); Leithwood (1978); Lipham (1980); Madden (1976); Michigan SDE (1974); Rosenblum (n.d.); Wellisch (1978).

2.9 INCENTIVES AND REWARDS ARE USED TO BUILD STRONG MOTIVATION

- Excellence in achievement and behavior is recognized. Requirements for awards are clear; explicit procedures ensure consistency; evaluations are typically based on standards rather than on comparisons with peers.
- Awards are set at several different levels of performance, providing all students with opportunities for success and recognition.
- Incentives and rewards are appropriate to student developmental levels, are meaningful to recipients and are structured to build persistence of effort and intrinsic motivation.
- Teaching excellence is recognized. All staff have the opportunity to work for rewards, according to objective, explicit criteria and standards; student achievement is an important success criterion.
- Both formal and informal recognition are used; at least some rewards are made publicly.

Armor (1976); Brookover (1979a,b); Gross (1965); Hall (1982); Lipham (1981); Wynne (1980).

2.10 PARENTS ARE INVITED TO BECOME INVOLVED

- Parents have various options for becoming involved in schooling, especially in ways that support the instructional program.
- Procedures for involvement are clearly communicated to parents and used consistently.
- Staff members provide parents with information and techniques for helping students learn (e.g., training sessions, handbooks).

Armor (1976); Brookover (1979b); California SDE (1977); Cotton (1980b); Levine (1981); New York SDE (1974); Wilson (1981).

2.11 TEACHERS AND ADMINISTRATORS CONTINUALLY STRIVE TO IMPROVE INSTRUCTIONAL EFFECTIVENESS

- Throughout the school there is an ongoing concern for improving instructional effectiveness. No one is complacent about student achievement; there is an expectation that educational programs will be changed so that they work better.
- School improvements are directed at clearly-defined student achievement and/or social behavior problems; strong agreement is developed within the school concerning the purpose of improvement efforts.
- Priority goals for improvement are set which give focus to planning and implementation. Goals which specify desired changes in achievement or social behavior are known and supported in the school community.
- The full staff is involved in planning for implementation; specific recommendations and guidelines provide the detail needed for good implementation; plans fit the local school context and conditions.
- Implementation is checked carefully and frequently; progress is noted and publicized; activities are modified as necessary to make things work better. Everyone works together to help the improvement effort succeed; staff members discuss implementation and share ideas and approaches.
- Resources are set aside to support improvement activities.
- School improvement efforts are periodically reviewed; progress is noted and the improvement focus is renewed or redirected; successes and new goals are reported.

Austin (1978); Berman (1978); Blumberg (1980); Bossert (1982); Brookover (1979b); Brundage (1979); Clark (1980); Crandall (1982); Duke (1982); Edmonds (1979a); Emrick (1977); Hall (1980); Hargrove (1981); Leithwood (1982); Lipham (1981); Little (1981); Madden (1976); New York SDE (1974); Purkey (1983); Stallings (1981a); Venezky (1979); Weber (1971); Wellisch (1978).

2.12 THERE ARE PLEASANT CONDITIONS FOR LEARNING

- Physical facilities are kept clean and made reasonably attractive; damage is repaired immediately.

Rutter (1979).

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3 DISTRICT CHARACTERISTICS AND PRACTICES

The district creates an environment in which the pursuit of instructional effectiveness is valued. Clear and stable policies, expectations for improvement and strong systems of support all help schools become more effective.

3.1 HIGH EXPECTATIONS PERVADE THE ORGANIZATION

- District leaders and staff believe that all students can learn and that district educators have a large degree of influence over whether students succeed or not. Learning is seen as the most important purpose of schooling.
- District goals and priorities for improvement are set and protected; they are made highly visible throughout the school community, particularly through the efforts of the superintendent. Goals focus on improving student performance.
- All district personnel are expected to work together for the benefit of students.
- Improving instructional effectiveness is a constant theme in district plans and activities; there is a strong expectation that instructional programs be improved over time.

Courter (1983), Enochs (1979), Purkey (1983).

3.2 THERE ARE POLICIES AND PROCEDURES THAT SUPPORT EXCELLENCE IN STUDENT PERFORMANCE

- All district policies are reviewed to determine the effect they have on student achievement. Policies are strengthened as necessary to increase support for specific district goals and for improving student performance in general.
- Policies and procedures are established that focus on improving student performance and require ongoing improvement efforts at every level in the district. Guidelines provide a framework for action rather than specific steps.
- School site management is in place and supported. Individual schools are expected to generate action plans for improvement and carry them out; building principals are expected to be instructional leaders.
- Expectations for participation in improvement efforts are established and enforced; building managers are included in district planning activities.

Courter (1983), Purkey (1983), Squires (1983).

3.3 STUDENT LEARNING IS CHECKED REGULARLY

- Information about student performance is collected and summarized at the district level. Strengths and weaknesses are identified; reports are prepared and shared throughout the community; special emphasis is placed on progress related to district goals and priorities.
- Assessment efforts are coordinated. District-level planning eliminates duplication of effort and ensures quality at all levels; assessments are regular, routine and cause minimum disruption of classroom instruction.
- Alignment between tests and the curriculum is checked and improved systematically.

- At the district level, clearly stated assessment procedures are carried out by district staff. Major tests are announced well in advance to allow time for building and classroom scheduling. There are specific routines for scoring, storing, reporting and analyzing results; results are reported quickly.
- Assessment results are used to evaluate programs and target areas for improvement.
- District staff provide direct support for building and classroom level assessment efforts.

Bacheior (1982); Behr (1981); Levine (1982a); Niedermeyer (1981).

3.4 IMPROVEMENT EFFORTS ARE MONITORED AND SUPPORTED

- District supervisors monitor implementation of policies and procedures in individual schools; they provide advice, clarifications, technical feedback and channel support services. In particular, they check on the progress of improvement efforts.
- Instructional support services assist local schools in their improvement efforts. Support staff provide consultation, materials development and training assistance on call; support services are very responsive to expressed building needs.
- A resource pool is allocated for use in building level improvement projects. District level departmental budgets include resource items specifically related to the attainment of district goals and priorities.
- Building managers participate in ongoing programs of staff development focused on strengthening instructional leadership skills.
- District leaders protect schools from political or economic turbulence which might disrupt classroom instruction.

Berman (1979); Levine (1982a); Little (1981); Purkey (1983); Stallings (1981a); Squires (1983).

3.5 EXCELLENCE IS RECOGNIZED AND REWARDED

- District leaders establish award programs for schools, administrators, teachers and students; they take a visible role in recognizing excellence. District award programs complement school award programs.
- Staff awards are based on contributions made to improving student performance; requirements and procedures are clear; recognition is based on comparison to standards rather than comparison to peers.

Enochs (1979)

3.6 CURRICULUM PLANNING ENSURES CONTINUITY

- Planning for curriculum and instruction is consistent at the district, school and classroom levels; district frameworks, guidelines and quality standards unify efforts districtwide.
- A limited number of priority objectives are identified and used to clarify what students are expected to learn. Objectives are sequenced by grade level; reviewed for technical quality, specificity and clarity; and targeted for students according to development level and what they are expected to learn.
- Objectives are selected which represent a range of learnings and are teachable within an established timeframe.

- Learning materials, space available and special facilities, staff and other instructional resources are identified and catalogued by objective or goal area.
- Resources are matched to objectives, checked for accuracy and alignment and matched to student development levels. Instructional strategies may also be identified and documented, especialry for high priority objectives.
- District staff provide direct support for building and classroom curriculum efforts.

Behr (1981); Denham (1980); Doherty (1981); Niedermeyer (1981).

Effective Schooling Research Bibliography

Introduction

Literature related to effective schooling has been gathered together in this bibliography. Research reports, syntheses, reviews and analytical commentaries are included to give the reader several alternatives in studying the knowledge base. References listed in the preceeding practices section can be found here in full bibliographic form.

Each reference has been classified according to its major theme. The six parts of the research base, as described in the introduction to this document, comprise the classification categories. Each reference includes a letter code at the end of the citation relating the reference to a particular part of the research base. The codes are as follows:

(A) School Effects
(B) Teacher Effects
(C) Instructional Leadership
(D) Curriculum Alignment
(E) Program Coupling
(F) Educational Change

Placing a reference in one category does not imply an exclusive focus in that category. Many authors address several effectiveness issues in a single study or review.

This bibliography is not comprehensive. While we believe that the core of the effectiveness literature is well represented, some studies not cited here may well be important in furthering the understanding of instructional effectiveness.

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